Claim Amendment

5. (Withdrawn).

6. (Withdrawn).

7. (Withdrawn).

8. (New) Process according to Claim 1 for the preparation of 4-trifluoromethyl-2-pyridinol

which comprises:

i) contacting a 4-alkoxy-1,1,1-trifluorobut-3-en-2-one of the formula

in which R represents C1-C6 alkyl,

with a trialkyl phosphonoacetate of the formula:

in which R is as previously defined,

and

 R^7 represents C_1 - C_6 alkyl

in the presence of a base and an alcoholic solvent to provide a mixture of intermediates,

and

ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.

Listing of Claims

1. (Original) Process for the preparation of substituted pyridine derivatives of formula (I)

wherein

 R^1 , R^2 independently the same or different are H; $C_{1\text{-}20}$ -alkyl (branched or straight chain or cyclic); $C_{6\text{-}20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, $C_{1\text{-}20}$ -alkoxy, $C_{6\text{-}20}$ -aryloxy, amino; F; Cl; Br; I;

 $R^3 = CN$, NO_2 , C_{1-20} -alkyl (branched or straight chain or cyclic); C_{6-20} -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C_{1-20} -alkoxy, C_{6-20} -aryloxy, amino; F; Cl; Br; I;

 $R^4 = E_n R_m^6$ in which

if n=m=1 than E=S and $R^6=C_{1\text{-}20}\text{-}alkyl$ (branched or straight chain or cyclic); $C_{6\text{-}20}\text{-}aryl$ - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, $C_{1\text{-}20}\text{-}alkoxy$, $C_{6\text{-}20}\text{-}aryloxy$, amino; F, Cl, Br, I;

if n=0 and m=1 than $R^6=H$, $C_{1\text{-}20}$ -alkyl (branched or straight chain or cyclic); $C_{6\text{-}20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, $C_{1\text{-}20}$ -alkoxy, $C_{6\text{-}20}$ -aryloxy, amino; F, Cl, Br, I;

$$E^1 = O, N$$

$$R^5 = H$$

n=1 for $E^1=0$ und 2 for $E^1=N$

comprising reaction of a α - β -unsaturated carbonyl compound of formula (II)

$$R^3$$
-C(O)-C(R^1)=C(R^2)-G (II)

wherein

R¹, R² and R³ have the above defined meaning;

 $G = -NH_2$ or a leaving group

with a Wittig reagent or Horner-Wadsworth-Emmons reagent of formula (III)

$$(P) = \begin{bmatrix} E_n R^6_m \\ I^n \end{bmatrix}$$

$$C-Y$$

$$R' = O - P - C - Y$$

$$R' = O - P - C - Y$$

$$(IIIa2)$$

wherein

(P)= $P(Ar)_3$, with Ar = substituted or preferably unsubstituted C_{6-20} aryl, R' = is equal or different independently means C_{1-20} alkyl, branched or straight or cyclic, or C_{6-20} aryl;

 $E_n R_m^6 = in which$

if n=m=1 than E=S and $R^6=C_{1\text{-}20}\text{-}alkyl$ (branched or straight chain or cyclic); $C_{6\text{-}20}\text{-}aryl$ - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, $C_{1\text{-}20}\text{-}alkoxy$, $C_{6\text{-}20}\text{-}aryloxy$, amino; F; Cl; Br; I;

if n = 0 and m = 1 than $R^6 = H$, C_{1-20} -alkyl (branched or straight chain or cyclic); C_{6-20} -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C_{1-20} -alkoxy, C_{6-20} -aryloxy, amino; F; Cl; Br; I;

Y = - CN; -C(O)NH₂; -C(O)OR⁷ with R⁷ = as defined for R¹ above, except H in the presence of a base and if

- i) Y = -CN or $C(O)NH_2$, G = a leaving group and the base is an alcoholate, subsequent acidic catalyzed, with zeolithes catalyzed or basic catalyzed cyclization;
- ii) $Y = -C(O)-OR^7$, G = a leaving group and the base is an alcoholate, subsequent basic cyclization in the presence of ammonia.
- 2. (Original) Process according to claim 1, wherein $R^1 = R^2 = H$ and $R^3 =$ electron withdrawing group.
- 3. (Original) Process according to claims 1 to 2, wherein $R^1 = R^2 = H$ and R^3 is a partially or fully fluorinated C_{1-6} -alkylgroup.
- 4. (Original) Process according to claims 1 to 3, wherein $R^3 = -CF_3$.
- 5. (Withdrawn)
- 6. (Withdrawn)
- 7. (Withdrawn)
- 8. (New) Process according to Claim 1 for the preparation of 4-trifluoromethyl-2-pyridinol

which comprises:

i) contacting a 4-alkoxy-1,1,1-trifluorobut-3-en-2-one of the formula

in which R' represents C₁-C₆ alkyl,

with a trialkyl phosphonoacetate of the formula:

in which R is as previously defined,

and

in the presence of a base and an alcoholic solvent to provide a mixture of intermediates,

and

ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.